16869K-040510US George B. F. Yee, Reg. No. 37,478 Telephone: 650-326-2400 Inventors: Takanori Nishio et al. Title: Operation Method of Storage and Storage and Remote Storage Used Therein Sheets of drawings 1 of 9

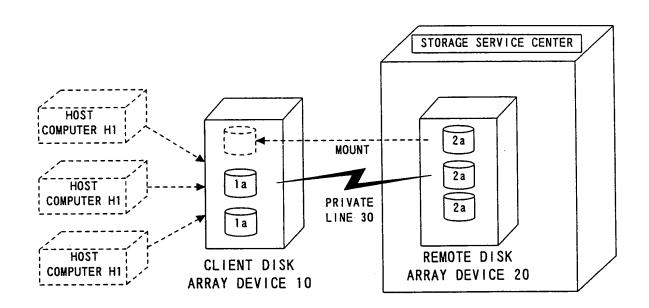
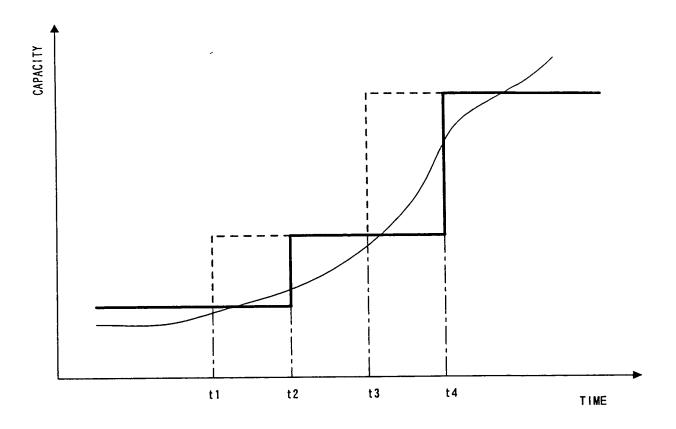


FIG. 1

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CAPACITY OF STORAGE AREA DEMANDED BY CLIENT DISK ARRAY DEVICE

CAPACITY OF STORAGE AREA PROVIDED BY INSTALLED DISK UNIT

CAPACITY OF STORAGE AREA AT TIME OF UTILIZATION OF REMOTE UNIT

FIG. 2

Title: Operation Method of Storage and Storage and Remote Storage Used Therein Sheets of drawings 3 of 9 HOST COMPUTER H1 CLIENT DISK ARRAY DEVICE 10 HOST INTERFACE 1b SERVICE CHANNEL PROCESSOR 1j ADAPTER 1c MANAGEMENT TERMINAL COMMON TERMINAL C1 INTERFACE 1H MEMORY 1f DISK ADAPTER CASH MEMORY 1 d 1e DISK UNIT GROUP COMMUNICATION INTERFACE 1g 1 a 1 a 1 a REMOTE DISK ARRAY DEVICE 20 COMMUNICATION SERVICE INTERFACE 2g PROCESSOR 2j COMMON TERMINAL MANAGEMENT INTERFACE 2h MEMORY 2f TERMINAL C2 CASH MEMORY DISK ADAPTER 2d 2e REMOTE UNIT GROUP CHANNEL ADAPTER 2c 2a 2a 2a HOST INTERFACE 2b HOST COMPUTER FIG. 3 H2

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PORT MANAGEMENT TABLE

					STARTING DATE	
PORT ID	CLASS	SLOT ID	SIZE	TYPE	OF OPERATION	REMOTE UNIT ID
001	INSTALLED	Α	20GB	HI-1	2001/01/05	
002	INSTALLED	В	50GB	IM — 1	2001/01/05	
003	INSTALLED	С	50GB	SG-1	2001/01/05	
004	INSTALLED	D	20GB	HI-1	2001/01/05	
005	INSTALLED	E	20GB	HI-1	2001/01/05	
006	INSTALLED	F	20GB	HI-1	2001/01/05	
007	INSTALLED	G	50GB	QM10	2001/01/05	
008	INSTALLED	Н	50GB	QM11	2001/03/22	
009	INSTALLED	Ī	50GB	QM12	2001/03/22	
010	REMOTE	_	50GB			RM-010
011	REMOTE	_	50GB			RM-011
012	REMOTE	_	50GB			RM-012
•	•	•	• _	•	•	•
•	•	•	•	•	•	•
•	•	•	•	•	·	•
	•	•	1	•	•	•

FIG. 4

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Inventors: Takanori Nishio et al.
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MOUNTING PROCESS

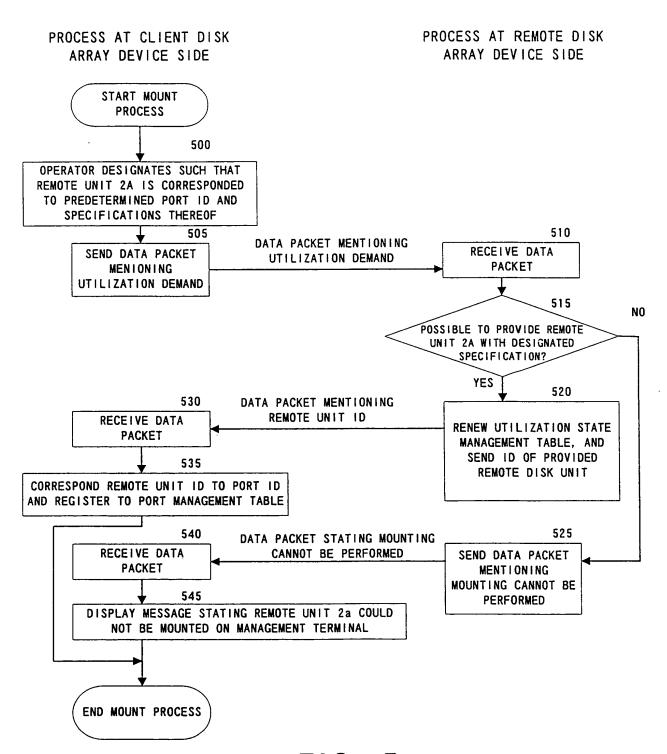


FIG. 5

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Inventors: Takanori Nishio et al.
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Sheets of drawings 6 of 9

PORT MANAGEMENT TABLE

				STARTING	********	[
	j				ODEDATION	
1				DATE OF	OPERATION	
PORT ID	SLOT ID	SIZE	TYPE	OPERATION	STATE	DEVICE ID
001	A	20GB	HI-1	_	NOT USED	1
002	В	50GB	IM-1	2001/01/05	MOUNTING	15542
003	С	50GB	SG-1	2001/01/05	MOUNTING	F1041
004	D	20GB	HI-1	2001/01/05	MOUNTING	I3314
005	Ε	20GB	HI-1	_	NOT USED	
006	F	20GB	HI — 1	_	NOT USED	_
007	G	50GB	QM10	_	NOT USED	_
008	Н	50GB	QM10	_	NOT USED	_
009	I	50GB	QM10		NOT USED	
010	J	50GB	HI-2		NOT USED	
011	K	50GB	HI-2	_	NOT USED	
012	L	50GB	HI-2	_	NOT USED	_
•	•	•	-	•	•	•
•	•	•	•	•	•	•
•	•	•	•	•	•	•
•	•	•	•	•	• •	•

FIG. 6

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WRITE-IN PROCESS

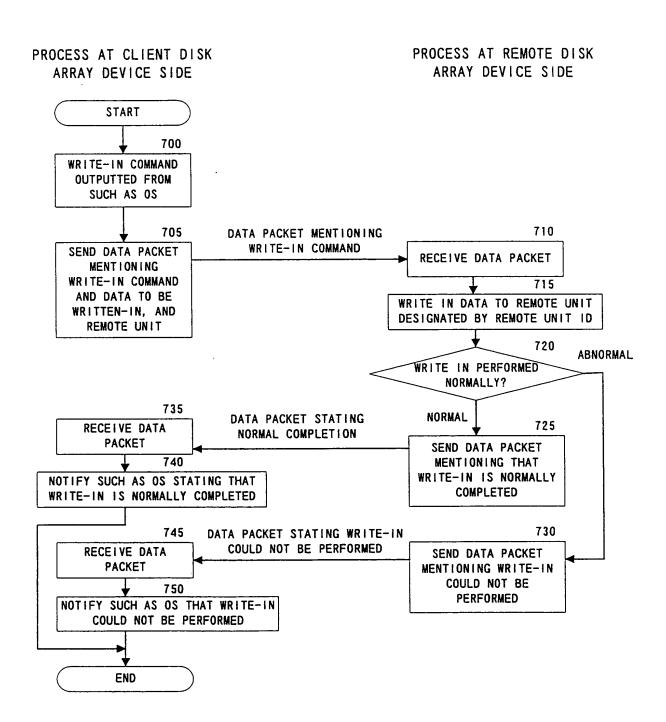


FIG. 7

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READ-OUT PROCESS

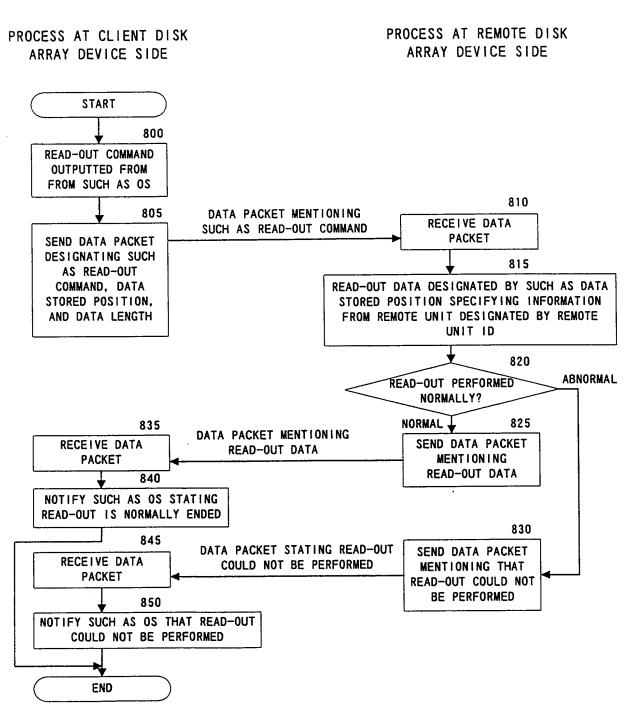


FIG. 8

16869K-040510US 16869K-040510US
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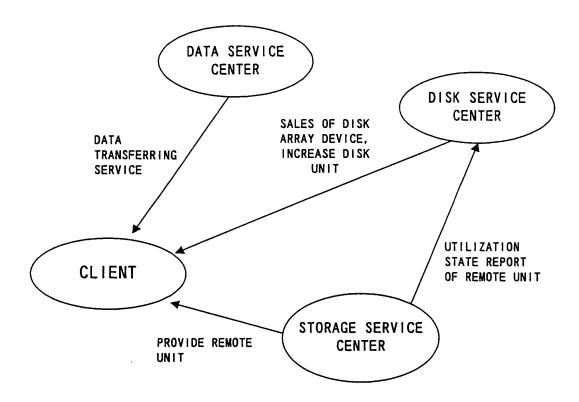


FIG. 9